

SYSTEM SUPPORT DIRECTIVE

ASR9

SDR-ASR9-010

6310

System Documentation Release

UPDATE TO SSM-ASR9-014

Highlights

- Updates SSM-ASR9-014

10/08/2004

1. PURPOSE. This system documentation release (SDR) provides an update to SSM-ASR9-014, Anomalous Propagation Filter, dated 5/20/2004, paragraph 15, Test After Modification.

2. DISTRIBUTION.

a. This SDR is distributed to selected offices and services within Washington headquarters, the William J. Hughes Technical Center, the Mike Monroney Aeronautical Center, regional Airway Facilities divisions, and Airway Facilities field offices having the following facilities/equipment: ASR-9.

b. An electronic version and distribution report of this SDR are available on an Intranet site located at <http://aos-ext.amc.faa.gov/> under the "Technical Documentation" heading.

c. To obtain additional hard copies of this publication, contact Printing & Distribution Team, AMI-700B, at (405) 954-6892.

3. WITHDRAWALS/CANCELLATIONS.

4. APPLICATION. The revised pages apply to all holders of SSM-ASR9-014.

SSD PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
<u>SSD TOC</u>			
All Pages	All Dates	All Pages	10/08/2004
<u>SSM-ASR9-014</u>			
5 and 6	05/20/2004	5	10/08/2004
		6	05/20/2004

5. CHANGES TO RECORDED DATA. Process a modification record and place this record into the Facility Reference Data File (FRDF) in accordance with the latest Order 6032.1 National Airspace System Modification Program and Order 6030.45 Facility Reference Data File.

DISTRIBUTION: 53AC

INITIATED BY: ASR-9
Terminal/RDAS Branch

6. ADDRESS CHANGES. Submit facility address copy count, and additions or deletions to Carrie Batty via email at Carrie.ctr.Batty@faa.gov.

7. RISKS. If changes are not incorporated, unauthorized configuration may degrade the efficiency of the National Airspace Systems (NAS) and the ability to maintain operations.

8. STATUS ACCOUNTING. The maintenance organization does not open LEM entries for documentation releases because the Facility/Service Equipment Profile (FSEP) does not clearly identify where all documentation is located. Providing your equipment is listed in the FSEP, you should open a Log Equipment Modification (LEM) record in the Maintenance Management System (MMS) for the system to be modified from paragraph 6, Application.

- a. Upon completion of this modification, you are required to close the LEM record and change the Maintenance Action Code (MAC) to:
 - (1) "G" if the modification was completed.
 - (2) "W" if the modification is not applicable.
- b. Verify that an "N" is in the "REP COD" field to ensure that the log entry will be upwardly reportable to the national database for National MOD Tracking.
- c. The data entry record is to be entered into the LEM as follows:

MMS FIELD NAME	DATA ENTRY
FAC/SERV:	Enter your facility/service type.
LOC INDENT:	Enter your site identification.
SHORT NAME:	Enter the short name for this equipment from MMS
ORDER#/SYSTEM:	SDR-ASR9
CHAP/SEQ#:	010
CHG:	D



for Richard A. Thoma
Director for Technical Operations Support

LIST OF APPENDIXES AND ATTACHMENTS		
ITEM	DESCRIPTION	QUANTITY
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ATTACHMENT 1. SSD TABLE OF CONTENTS

SYSTEM SUPPORT DIRECTIVE (SSD)

TABLE OF CONTENTS

SYSTEM SUPPORT MODIFICATIONS (SSM)

<u>Document Number</u>	<u>Date Issued</u>	<u>Title</u>
SSM-ASR9-001	04/23/99	ASRS-9 SERIAL INTERFACE SYSTEM
SSM-ASR9-002	02/06/98	TRANSMITTER POWER INTERRUPT AND BLOWER MOTOR FUSE
SSM-ASR9-003	10/19/99	REMOVAL OF CIRCUIT BREAKERS FROM MODEM RACK
SSM-ASR9-004	03/13/98	UPGRADE MODE-S INTERFACE SUPPORT
SSM-ASR9-005	04/01/99	PROCESSOR AUGMENTATION CARD PHASE I
SSM-ASR9-006	04/29/98	ASR-9 REMOTE SCIP CIRCUIT BREAKER WIRING CONNECTION
SSM-ASR9-007	06/07/99	ALTERNATE DUAL REDUNDANT MODIFICATION
SSM-ASR9-008	08/02/99	MUFFIN FAN REPLACEMENT
SSM-ASR9-009	TBD	PROCESSOR AUGMENTATION CARD PHASE II
SSM-ASR9-010	CANCELLED	ASR-9 UPDATES
SSM-ASR9-011	03/26/03	SOFTWARE SUPPORT FOR THE WEATHER SYSTEMS PROCESSOR
SSM-ASR9-012	06/19/03	WEATHER SYSTEMS PROCESSOR INTERFACE TO THE ASR-9
SSM-ASR9-013	06/05/01	ASR-9 SERIAL INTERFACE SYSTEM (ASIS) PHASE II
SSM-ASR9-014	05/20/04	ANOMALOUS PROPAGATION (AP) FILTER
SSM-ASR9-015	TBD	UPDATE PROCOMM PLUS SCRIPTS
SSM-ASR9-016	07/14/03	ASR-9 SERIAL INTERFACE SYSTEM (ASIS) PHASE II DUAL BOARD

SYSTEM TECHNICAL RELEASES (STR)

<u>Document Number</u>	<u>Date Issued</u>	<u>Title</u>
STR-ASR9-001	02/06/98	DELIVERY OF AIRPORT SURVEILLANCE RADAR-9 PROCOMM SOFTWARE UPDATE
STR-ASR9-002	12/29/98	DELIVERY OF AIRPORT SURVEILLANCE RADAR-9 PROCOMM SOFTWARE UPDATE VERSION 5.0
STR-ASR9-003	11/29/99	DELIVERY OF AIRPORT SURVEILLANCE RADAR-9 SOFTWARE UPDATE VERSION 6.0
STR-ASR-9-004	12/15/99	ASR-9 VARIABLE SITE PARAMETERS AND PROGRAMMABLE ALARM THRESHOLD/FILTER BASELINE
STR-ASR9-004A	06/20/01	ASR-9 VARIABLE SITE PARAMETERS AND PROGRAMMABLE ALARM THRESHOLD BASELINE UPDATES

SYSTEM DOCUMENTATION RELEASES (SDR)

<u>Document Number</u>	<u>Date Issued</u>	<u>Title</u>
SDR-ASR9-001	CANCELLED	BY SDR-ASR9-002
SDR-ASR9-002	CANCELLED	BY SDR-ASR9-003
SDR-ASR9-003	05/09/02	ASR-9 TECHNICAL INSTRUCTION BOOKS UPDATE AND REISSUE OF ASR- 9 TI CD ROM
SDR-ASR9-004	09/02/03	DELIVERY OF THE AIRPORT SURVEILLANCE RADAR-9 OPTIMIZATION PROCEDURES
SDR-ASR9-005	07/12/04	UPDATE TO STR-ASR9-004A
SDR-ASR9-006	01/23/04	UPDATE TO SSM-ASR9-012 OMIT INCORPORATION OF TI 6310.28 PAGE CHANGES
SDR-ASR9-007	TBD	UPDATE TO TI 6310.28

SYSTEM DOCUMENTATION RELEASES (SDR) (Continued)

<u>Document Number</u>	<u>Date Issued</u>	<u>Title</u>
SDR-ASR9-008	05/25/04	UPDATE TO EEM 6310.18, CHG. 19, CHAP. 16
SDR-ASR9-009	TBD	TBD
SDR-ASR9-010	10/08/04	UPDATE TO SSM-ASR9-014
SDR-ASR9-011	10/06/04	ANTENNA WRENCHES

ATTACHMENT 2. SSM PAGE CHANGES

(4) Use RMS 6-LEVEL WEATHER DETECTION PERFORMANCE menu (0.3.2.6) and record the severity of the AP:

of level 1 detections: _____
 # of level 2 detections: _____
 # of level 3 detections: _____
 # of level 4 detections: _____
 # of level 5 detections: _____
 # of level 6 detections: _____

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d. Re-enable the AP filter function.

(1) Set the switches on the 6WX Log I/Q Combiner (slot 106 in the weather channel) as follows:

1 = ON 2 = ON 3 = OFF 4 = ON

e. Observe the AP filter in action. Verify that most of the simulated AP is removed.

(1) Wait 1 minute for the effects of the switch change to become stabilized.

(2) At the maintenance display, observe that the quantity and severity of the AP is greatly diminished.

(3) Use RMS 6-LEVEL WEATHER DETECTION PERFORMANCE menu (0.3.2.6) and record what little AP remains:

of level 1 detections: _____
 # of level 2 detections: _____
 # of level 3 detections: _____
 # of level 4 detections: _____
 # of level 5 detections: _____
 # of level 6 detections: _____

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f. Restore the system to normal operation.

(1) Use RMS WEATHER CHANNEL STC menu (5.3.6.4) and restore the value of VSP 6401 (6WX STC Reference Attenuation) to the value recorded in step 15b(6).

(2) Load this VSP value into the system.

(3) Use RMS UNAVAILABLE/STANDBY/SCIP RECONFIGURATIONS menu (0.1.2) and put the weather channel into STANDBY mode.

(4) Use RMS SYSTEM CONTROL PANEL menu (0.1.1) and put the 6-LEVEL WEATHER online.

(5) Use RMS SYSTEM CONTROL PANEL menu (0.1.1) and put the Antenna Polarization into LINEAR.

(6) Use RMS SYSTEM CONTROL PANEL menu (0.1.1) and put the Antenna Polarization into AUTO mode.

(7) If the facility is operating with a WSP, put the WSP in operational mode.

16. RESULT OF MODIFICATION. The 6WX channel is now capable of detecting and eliminating the bulk of the AP presented to it. What little AP remains, if any, will be significantly reduced in intensity.

17. CHANGES TO INSTRUCTION BOOKS. All holders of the Instruction Books are to update their books dated November 2001 with the attached change pages.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
<u>TI 6310.24 Section 1-2, 4-8, and 10</u>			
xxix and xxx	undated	xxix	05/20/2004
		xxx	undated
2-7 and 2-8	undated	2-7	undated
		2-8	05/20/2004
2-43 through 2-46	undated	2-43	undated
		2-44 through 2-45b	05/20/2004
		2-46	undated
<u>TI 6310.24 Section 3.0 - 3.4, Part 1, Volume 1</u>			
3-17 and 3-18	undated	3-17	05/20/2004
		3-18	undated
<u>TI 6310.24 Section 3.7 - 3.21, Part 3, Volume 3</u>			
3-379 through 3-382	undated	3-379	undated
		3-380	05/20/2004
		3-381	undated
		3-382	05/20/2004
<u>TI 6310.28</u>			
ix	03/26/2003	ix	03/26/2003
x	undated	x	05/20/2004
xxi and xxii	undated	xxi	05/20/2004
		xxii	undated
<u>TI 6310.28 (Continued)</u>			
xxv and xxvi	24 January 2000	xxv	05/20/2004
		xxvi	24 January 2000